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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/536,000	03/27/2000	Andrew D. Bailey III	LAMIP130/P0566	6323

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BEYER WEAVER & THOMAS LLP
P.O. BOX 778
BERKELEY, CA 94704-0778

EXAMINER

ALEJANDRO MULERO, LUZ L

ART UNIT	PAPER NUMBER
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1763

15

DATE MAILED: 10/21/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/536,000

Applicant(s)

BAILEY ET AL.

Examiner

Luz L. Alejandro

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 28-41 is/are pending in the application.
- 4a) Of the above claim(s) 9-11 and 39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 28-38 and 40-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Prosecution Application

The request filed on 9-10-02 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/536,000 is acceptable and a CPA has been established. An action on the CPA follows.

Election/Restrictions

Claims 9-11 and 39 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 10 to an embodiment where every magnetic element is rotated about its own axes, which clearly implies a permanent magnet.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1-8, 28-38, and 40-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Bailey, III et al..

Bailey, III et al. shows the invention as claimed including a plasma processing apparatus 100 for processing a substrate comprising the claimed limitations, for example, magnet elements arrangement 132 including 32 permanent magnets (see col. 8-lines 36-48) which can alternatively be electromagnets around the outside of a chamber wall, and wherein each of the plurality of magnet elements spans substantially from the top end to the bottom end of the process chamber, and a device for changing a cusp pattern with respect to said wall between the plurality of magnetic elements, wherein said device rotates each magnetic element individually around an individual axis of rotation passing through the magnetic element and parallel to the height of the chamber (see Fig. 6C and col. 14-line 66 to col. 15-line 6). Furthermore, note that the apparatus of Bailey, III et al. is capable of each magnetic element being rotated at a same angular speed and angular direction, and the magnetic field at the substrate is substantially zero.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-4, 6-8, 28-29, 35-38, and 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Setoyama et al., U.S. Patent 6,196,155 in view of Sakai, U.S. Patent 5,855,725.

The rejection is maintained as stated in paper #11 mailed 6-27-02 for the reasons of record. Additionally, the apparatus of Setoyama et al. is capable of rotating each magnet individually at a same angular speed and angular direction around an individual axis of rotation. Furthermore, the magnetic field at the substrate is substantially zero and the axis of rotation for each magnet extends along the length of the magnet and is parallel to the chamber axis.

Claims 5 and 30-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Setoyama et al., U.S. Patent 6,196,155 in view of Sakai, U.S. Patent 5,855,725 as applied to claims 1-4, 6-8, 28-29, 35-38, and 40-41 above, and further in view of Sekine

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et al., U.S. Patent 5,660,744 or Barankova et al., WO 99/27758 or Bailey, III et al. U.S. Patent 6,341,574 B1.

The rejection is maintained as stated in paper #11 with respect to claims 5, 9-11, and 30-34 for the reasons of record.

Response to Arguments

Applicant's arguments filed 9-10-02 have been fully considered but they are not persuasive. Applicant argues that neither Bailey, III et al. or Setoyama et al. disclose a device for rotating magnets so that each magnetic field of each magnetic element is individually rotated at a same angular direction and angular speed around an individual axis of rotation. However, both Bailey, III et al. and Setoyama et al. show an apparatus capable of rotating a magnetic field in the above manner.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luz L. Alejandro whose telephone number is 305-4545. The examiner can normally be reached on Monday-Thursday from 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Mills, can be reached on 308-1633. The fax phone numbers for the organization where this application or proceeding is assigned are 872-9310 for regular communications and 872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0661.

A handwritten signature in cursive script, appearing to read "Alejandro", written in black ink.

Luz L. Alejandro
Patent Examiner
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October 19, 2002